SANITATION AUTHORITY
SAMPLE EMERGENCY PLAN

PURPOSE

The Authority has developed a written Emergency Plan (EP) to handle emergencies. These include fire, toxic chemical release, hurricanes, tornadoes, blizzards, floods, and computer related failures . It's also essential that plant operations include the monitoring of plant wastewater treatment processes, power supply and other important services until evacuation becomes absolutely necessary.

SCOPE

Authorities's top priority, for example, is the containment of toxic chemical release, fire, hurricanes, tornadoes, blizzards, floods, computer related failures, and responding to medical situations as they occur. The response should be immediate and every employee should know the basic procedures to follow when an emergency happens. Our staff is trained in first aid, CPR, HAZWOPER, OHSA, and FEMA training procedures that they are instructed to follow when any of these emergencies occur. This program applies to all personnel, contractors, visitors, and all Authority facilities.

I. INTRODUCTION

Plant operations also include chemical processes which must be shut down in stages or steps. Certain employees must be present to ensure that safe shut down procedures are completed. Essential plant operations may include the monitoring of plant power supplies, water supplies, and other important services which cannot be shut down for every emergency alarm.

The Authority's Treatment Division is responsible for preventing spills and making sure containers are intact and handled carefully. But, if there is a spill, we all have responsibilities, too. A chemical can cause a fire or explosion, or release toxic substances into the air or water that can affect the surrounding community. It's vital that we know exactly what to do and we do it quickly. The faster the spill is contained the better chance it will not harm anyone. That's the Authority's goal.

A. These chemical emergency procedures apply to all Authority employees and other individuals on the Authority's property.
B. The procedures are written in broad, general terms. It is essential that all employees know how to implement this system if an emergency situation occurs.
C. The implementation of this Emergency Plan (EP) must be given top priority by all Authority staff.

II. DEFINITIONS

Buddy system	Organizing employees into work groups to be observed by at least one other employee in the work group.
Evacuation	During emergency situations it may be necessary to remove employees from buildings, Pump stations, or plant site for safety reasons.
FEMA	Guidelines for handling natural disasters from the Federal Emergency Management Agency or the State Emergency Management Agency.
Shutdown	Certain employees will be designated to turn off equipment, facility system, such as gas and electrical power before leaving the work areas.
HAZWOPER	Emergency response personnel qualified in handling chemical leaks or spills.
Hazards	Physical and health hazards include motion (i.e. machinery and flying objects), high or low temperatures, chemical exposure, harmful dust, light radiation, falling objects, sharp objects, electrical hazards, and coworkers. Falling, moving, or flying objects, heat or cold, moving equipment or parts, and sharp objects, are all hazards in the workplace.
MSDS	Material Safety Data Sheet is a form that provides a wide range of safety information you need to know to work safely with the chemical.
OSHA	Safety guidelines from the Occupational Safety and Health Administration.
PPE	Protection for eyes, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers shall be provided by Authority for it's staff to used and maintained.

III. EMERGENCY ACTION PLAN

The effectiveness of response during emergencies depends on the amount of planning and training performed. It is the Safety Manager's responsibility to ensure that this program is implemented and frequently reviewed and updated.

A. Shift Supervisor should have a detailed list of procedures to be taken by those employees who have been selected to remain behind. Employees will be monitoring all equipment and treatment processes until evacuation becomes absolutely necessary.

B. Only those employees who have completed 40 hrs of HAZWOPER training will be first responder for rescue and medical first aid.

C. Shift Supervisor should inform his/her staff what action they are to take in these emergency situations which might occur in the workplace.

IV. EMERGENCY EVACUATION

At the time of an emergency evacuation, employees should know what type of evacuation is necessary and what their role is in carrying out the plan.

A. Shift supervisor should have list of essential employees to remain at their work station.

D. Floor plan or workplace maps should clearly show the emergency escape routes for
only those employees in the immediate area.

E. Supervisors should direct their staff where they are to go and reassemble for a head count. This head count will be given to management as soon as possible.

F. Employees must be sure that they know what is expected of them in all such emergency possibilities. Supervisors shall walk his/her staff through these procedures to provide assurance of their safety from fire or other emergencies.

G. Management will assign a person to operate the base station to account for personnel and to inform police or emergency response team members of those persons believed to be missing.

H. All employees should be instructed to move away from the exit discharge doors of the building and to avoid congregating close to the building where they may hamper emergency operations.

V. EMERGENCY ACTION PLAN TRAINING

Shift supervisor should ensure that an adequate number of his/her staff are available at all times during working hours to act as evacuation wardens so that employees can be moved quickly from the danger location to the safe areas.

A. Generally, one Lead for 10 employees in the workplace should be able to provide adequate guidance and instruction at the time of a fire emergency.

B. The employees who are selected or volunteer to serve as a Lead should be trained in the complete workplace layout and the alternative escape routes from the workplace.

C. All Leads and employees should be made aware of handicapped employees who may need extra assistance, such as using the buddy system, and know the hazardous areas to be avoided during emergencies.

D. Supervisor and Lead should check rooms and other enclosed spaces in the workplace for employees that may be trapped or otherwise unable to evacuate the area.

E. Supervisors should be able to count for or verify that all employees are in the safe areas.

VI. SPILL PREVENTION

Improper handling of hazardous chemicals is a severe threat to employees and to the general public when containers leak or spill. The best way to handle spills and leaks is to prevent them. Remember these spill prevention tips:

- **Know the chemical** you are handling so that you can take the proper precaution.
- **Read labels and MSDS** and follow their hazard prevention guideline.
- **Use the right PPE** for the chemical you are using.
- **Pay attention** to hazardous material safety training.
- **Inspect chemical containers** for leaks or damage.
- **Don't leave chemical containers open** when not in use.
- **Report any chemical hazards** to your supervisor immediately.

VII. SUPERVISORS RESPONSIBILITIES

A. Ensure that your staff knows emergency escape procedures and emergency escape route assignments. For emergency evacuation, the use of floor plans or workplace maps that clearly show the emergency escape route and safe or refuge areas should be included.

B. Head count procedures of the employees who remain in their work areas need to be reported to management.

C. Supervisor must list in detail the procedures to be taken by those employees who remain behind to care for essential plant operations until their evacuation becomes absolutely necessary.

D. Report your staff head count to management after an emergency has been completed.

All employees must be told what actions they are to take in emergency situations that may occur in the workplace, such as a designated meeting location after evacuation.

E. Management will need to know when all personnel have been accounted for.

F. Emergency response and rescue teams are the first line of defense in emergencies. Before assigning any personnel to these teams, the employee must be physically capable of performing these duties.

G. The method for reporting any emergencies is to contact the switchboard operator by telephone (telephone number) or radio (call "Base") and advise of the following:

   A. your name;
   B. nature of the emergency; and
   C. your location.

Emergency phone numbers should be posted on or near the phone and on employee bulletin boards. Supervisor must explain to each employee the means of reporting emergencies to the fire department, police department, enforcement officials, and private sector.

1. Provide a coordinated procedure to safeguard personnel and property in the event of a chemical spill or release.
2. Expedite recovery operations if a chemical spill or release creates an emergency situation.
3. Emergencies do not follow a standard pattern and employees must be prepared to adapt to various situations.
4. The necessity for an Emergency Plan (EP) becomes evident when you consider the chemical spill or release. Prevention of injuries and impact on the local environment are "key considerations" of an EP.

5. Employees will receive training to be the first responders. This training will be in accordance with Hazardous Waste Operations and Emergency Response (HAZWOPER).
6. During the day shift on Monday through Friday, Authority management personnel are responsible for their respective areas of accountability. They are responsible for calling in the required assistance, minimizing equipment damage, and providing guidance to employees who will be dealing with the emergencies.
7. On evenings and weekends, the shift supervisors have immediate responsibility for the entire facility. They are responsible for calling in the required assistance, minimizing equipment damage, and providing guidance to employees who will be dealing with the emergencies.

VIII. CHEMICAL SPILL OR LEAK

A. Remember that safety comes first—stopping the leak is secondary. Safety is enhanced when a reasonably cautious, pre-planned, deliberate approach to the problem is taken.
B. Determine if the leak is a loss of containment. A loss of containment is defined as an uncontrolled discharge or release of a chemical. Examples include pipe breakage, tank failure, significant spillage during off-loading, and discharge to the atmosphere.
C. Examples not considered a loss of containment include small qualities spilled, but contained, during planned maintenance or off loading. Any release to the environment (air, ground, storm sewer) will be considered a loss of containment.
D. Contact the Shift Supervisor immediately. He will evaluate the situation and notify the appropriate personnel.
E. Obtain a MSDS safety sheet from the Operator II work station. Attempt to contain or limit the spill if safe to do so. If a leak or spill is minor and can be contained by turning off a pump, closing a valve or spreading absorbent materials, then do so. Warn co-workers in the immediate vicinity of a chemical spill or release. All personnel must maintain a safe distance from the chemical spill or release.

IX. SHIFT SUPERVISOR RESPONSIBILITIES

A. The Shift Supervisor is responsible for the facility 24 hours a day. He or she will make the necessary decisions and take appropriate actions. During the day shift hours he or she will consult with the supervisor in the area that the incident occurred.
B. Upon arrival at the location, determine what action has been taken and proceed accordingly. Obtain a MSDS safety sheet. Handbooks are located at all Operator II work stations and in the supervisor trailer. MSDS safety sheets may also be found at each chemical delivery location.
C. If there is a loss of containment, evaluate and determine:
    1. the estimated quantity or amount released;
    2. the release point (air, ground, storm sewer, sump pump, etc.) and;
    3. potential hazards to personnel and/or the environment.

D. While it is important to respond to a chemical spill/release promptly, it is important to avoid an unnecessary evacuation of the area.

E. If a rescue squad is needed, call 911 and be prepared to give the following information:
   A. your name;
   B. nature of emergency;
   C. plant address; and
   D. telephone number:

F. Advise rescue that someone will meet them at the front or back gate to direct them to the scene. Do not hesitate to call for assistance. Assign two people to the front and back gate. Restrict pedestrian and vehicular traffic as necessary.

G. If the switchboard is operational, contact the operator and advise that you are there and verify the location of the injured/ill person.

H. If the switchboard is not operational, send one employee to the front or back gate with instructions to direct the rescue squad to the location of the injured/ill person.

I. Notify the following:
   1. Safety Manager (name), (telephone number), and (beeper number). If calling beeper, identify an emergency situation. The Safety Manager will determine if HAZMAT needs to be notified. If the Safety Manager cannot be located, it will be the supervisor's responsibility to determine the course of action to be taken.
   2. Director of Treatment (name), (telephone number), and (beeper number) If calling beeper, identify an emergency situation. The Director of Treatment will determine whether notifying the Engineer-Director and Deputy Engineer-Director is necessary. If Director of Treatment cannot be located, the supervisor will determine if notifying the Engineer-Director is necessary.

J. Communicate to the people listed below the information obtained in IX C 1-3 above. Be prepared to discuss the specific properties and hazards associated with the released chemical and any containment activities that have occurred.
   1. Safety Manager
   2. Director of Treatment
   3. Process Equipment Manager
   4. Engineer-Director
   5. Deputy Engineer-Director

K. For immediate advice, reportable amounts, etc., on hazardous chemicals, call CHEMTREC 1-800-424-9300 for HAZMAT, call 911.

L. If HAZMAT is called, the supervisor will advise them of the situation. Be prepared to discuss what has happened, what is happening, and what needs to be done. HAZMAT will evaluate the incident and determine the course of action to be taken. Provide them with any resources needed.

M. If HAZMAT is not needed, the Shift Supervisor will be in charge of the situation. During day shift hours, he/she will get input from senior staff and day shift treatment supervisors. Document in detail every action taken. Note if any alarms or other safety equipment failed.

N. Assign a HAZWOPPER certified person to the area to help with on-scene organization, coordination, and safety.

O. Standard safety practices should include:

1. avoiding contact with hazards;
2. minimizing the number of people;
3. using the "buddy system" and have back-up personnel;
4. establishing evacuation routes;
5. minimizing traffic flow;
6. maintaining communications;
7. evaluating personal protective clothing and equipment;
8. identifying decontamination station; and
9. monitoring site continuously and thoroughly.

After all clean-up activities have ceased, prepare a written report detailing the incident. Include the names of all parties involved. Conduct a post-release investigation, report findings, and make recommendations to the Safety Manager. The Safety Manager will work with the Treatment Director to address findings and recommendations.

X. EMPLOYEE RESPONSIBILITIES

A. Any employee who sees a chemical spill or chemical release is responsible for initiating this EP.
B. When a chemical leak or spill occurs, notify the immediate supervisor.
C. Employees should have a working knowledge of all chemical processes.
D. In an emergency situation involving a chemical leak, know where the valve(s) are located to be closed and the pumps to be turned off, if safe to do so.
E. The personal protective equipment most often used during a chemical spill or release is respiratory protection equipment and/or protective covering equipment.
F. Respiratory protection should be provided for emergency response personnel and other in-plant personnel who need to remain in the affected area.

XI. CHEMICAL RELEASE NOTIFICATION:

Upon notification of a chemical release and after all employees are counted for, the Safety Manager will notify:

1. Department of Natural Resources (DNR), Department Environmental Quality (DEQ), State EPA, or other appropriate agencies
2. National Response Center 1-800-424-8802
3. The local Council of Governments (COG)
4. Local Health Departments
5. Local Emergency Management Agencies
6. Supervisor on duty will follow the procedures for the approved Notification Roster.

XII. EMERGENCY PROCEDURES FOR RAW SEWAGE RELEASE AND NOTIFICATION:

The release or overflow of raw sewage from pumping stations, manholes or other points in the collection system should be reported immediately. The release or bypass of partially treated or non-disinfected wastewater form the treatment plant should also be reported immediately. Immediately notification of irregular operations or spill of raw sewage or partially treated wastewater can potentially lessen or avoid any impacts on public health.

Upon notification of a raw sewage or partially treated sewage release, the Safety Manager will notify:

1. Department of Health, Department of Natural Resources (DNR), State EPA, or other appropriate agencies.
2. All down stream drinking water suppliers (surface water as well as ground water) with in the watershed. If the discharge occurs in tidal water, also notify all up stream water suppliers with in the tidal zone.
3. Local Health Departments
4. The local Council of Governments (COG)
5. Supervisor on duty will follow the procedures in Policy E-4 VII Notification Roster.

XIII. WORKPLACE FIRE EMERGENCY:

Know your escape route —The Authority has an emergency evacuation plan. Learn escape routes from all of your work areas. In a real fire, dense smoke may reduce your vision and the lights may be out. Fire is one of the most threatening emergencies that can arise in the workplace. Some common causes of workplace fires are:

A. improper use or maintenance of electrical equipment;
B. improper use or storage of flammable liquids;
C. careless smoking; and
D. poor housekeeping.

- **Fire drills are important**--Know the sound of emergency alarms at all facilities . Pay attention during drills so you know what to do and where you are to report.
- **Act fast**—If you spot a fire, activate the facility alarm systems. When an alarm sounds, get out immediately according to your escape plan.
- **Dail 911** for the fire department.
- **Follow Procedures**-Know established fire emergency procedures.